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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

February 17, 1995

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William F. Caton  
Acting Secretary  
Federal Communications Commission  
Mail Stop 1170  
1919 M Street, N.W., Room 222  
Washington, D.C. 20554

Dear Mr. Caton:

Re: *WT Docket No. 94-148 - Reorganization and Revision of Parts 1, 2, 21, and 94 of the Rules to Establish a New Part 101 Governing Terrestrial Microwave Fixed Radio Services*

On behalf of Pacific Bell, Nevada Bell, and Pacific Bell Mobile Services, please find enclosed an original and six copies of their "Comments" in the above proceeding.

Please stamp and return the provided copy to confirm your receipt. Please contact me should you have any questions or require additional information concerning this matter.

Sincerely,



Enclosures

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Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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In the Matter of

Reorganization and Revision of  
Parts 1, 2, 21, and 94 of  
the Rules to Establish a New  
Part 101 Governing Terrestrial  
Microwave Fixed Radio Services

WT Docket No. 94-148

**COMMENTS OF PACIFIC BELL, NEVADA BELL, AND  
PACIFIC BELL MOBILE SERVICES**

Pacific Bell, Nevada Bell, and Pacific Bell Mobile Services hereby comment on the Notice of Proposed Rulemaking in the above-captioned proceeding regarding the consolidation of rules for common carrier and private fixed services currently in Parts 21 and 94 respectively into a new Part 101. While we are pleased with the Commission's attempt to conform and simplify the rules, we have some concerns which we will address below.

I. **AUTOMATIC TRANSMITTER POWER CONTROL**

The Commission should take the creation of Part 101 as an opportunity to address the option of using Automatic Transmitter Power Control ("ATPC"). ATPC should be made available to both common carrier and private users.

There has been much confusion over the years among users and coordinators over how to use ATPC and what is the acceptable, or required, relationship between maximum transmit power, coordinated power, and nominal power. Since the present Part 21 and 94 do not define these relationships many users refer to TIA Bulletin for guidance. TIA Bulletin 10 shows how to make a series of calculations to determine the proper coordination power and gives examples of how to do this. Unfortunately, the simplified equations that calculate the time that the ATPC transmitter will exceed the coordinated power don't include the route average temperature, climate factors, or terrain roughness; factors which can have a very large effect on the path fading activity and hence the amount of time that an ATPC transmitter must operate at higher power levels.

A coordinator receiving prior coordination data from an applicant wishing to use ATPC has no way of knowing whether the proposed coordination transmitter power level is reasonable or meets Bulletin 10 guidelines. The only way to find out is to obtain detailed path design data from the applicant and then re-engineer his route to see if the path has adequate ground clearance, whether the applicant has considered the possibility of ducting, factored in rain attenuation, etc., then has to run a series of Bulletin 10 calculations to see if the applicant's system complies with the guidelines.

It's obvious that using Bulletin 10 to determine the coordination transmitter power level for a path has two major problems: 1) it requires an inordinate amount of extra work for both the ATPC user and coordinators and 2) it can be wildly inaccurate. The series of calculations required in Bulletin 10 imply

preciseness but the important variables that are not included in the calculations make the results useless, even as guidelines.

In order to simplify the procedure and obtain a more realistic objective we propose that the ATPC coordinated transmitter power always be set 10 dB below the maximum transmitter power. Or for step-type ATPC transmitters use the step level if it is less than 10 dB. Experience has shown that the 10 dB down level is reasonable and has already been used as a de facto standard by many. Backup calculations from Bulletin 10 or elsewhere are unnecessary.

To implement this proposal the Commission should specify in Part 101 that the ATPC coordination transmitter power level be 10 dB below the maximum transmitter power level (or for step-type ATPC transmitters the step level). The Commission should also specify that applications and prior coordination data for ATPC radios include the three transmitter power levels:

- 1) The maximum power level, 2) The coordination transmitter power level (10 dB lower), and 3) The nominal transmitter power level which for most ATPC radios is 10 to 15 dB below the maximum power level. The application and prior coordination data forms will have to be modified to include this data.

Use of a standard relationship between maximum transmit power and coordination power will help reduce confusion as to how to apply ATPC radio.

## II. CREATING PARITY BETWEEN COMMON CARRIERS AND PRIVATE OPERATORS

In Section 101.5 there is a conflict between subparts (a) and (d).

Subpart (d) permits private radio services to construct prior to grant of a license.

Subpart (a) relating to common carriers does not permit construction prior to a license grant. Consequently, common carriers must wait until the authorization is approved before they begin construction, while private radio services do not.

There is no reason to impose a delay on construction for common carriers. The new rule should allow both private service providers and common carriers to begin construction but not operation as soon as FAA clearances have been received.

Sections 101.13 and 101.15 should be combined. A single application form should apply to both common carrier and private fixed radio services. This would greatly simplify the application process. Moreover, there is no rationale offered for some of the distinctions made in the two rules. For example, Section 101.15(a) retains the distinction noted above between private radio services and common carrier radio services with respect to pre-grant construction. In addition, Section 101.15(b) requires common carriers to file a certification of completion. This requirement should be extended to private operators.

Section 101.15(d) and 101.13(d) contain different periods for filing for license renewals. The private operators must file within 90-30 days of expiration, while the common carriers must file within 60-30 days. Both services should have the same filing requirement of being required to file renewals within 90-30 days of expiration.

In Section 101.39(b) private operators may request the return of applications for correction without dismissal. There is no corresponding rule for common carriers. Section 101.39(b) should apply to both private operators common carriers.

Section 101.65 sets forth the conditions under which a common carrier is subject to forfeiture and termination of the station authorization. Private operators should be subject to the same rule.

### III. TECHNICAL ISSUES IN PART 101

Section 101.21(c) requires that applications proposing a new or replacement antenna must include an antenna radiation pattern showing the antenna power gain distribution in the horizontal plane expressed in decibels, unless such pattern is known to be on file with the Commission. In that case, the applicant may reference in its application the FCC-ID number that indicates that the pattern is on file with the Commission. The private radio bureau has not been assigning FCC-IDs for some time, consequently, applicants will often need to include an antenna radiation pattern. If the Commission intends to retain this requirement it should publish the entire list of antennas and FCC-IDs so that the industry can easily determine which antennas have IDs. However, a better alternative would be for the Commission to provide that if the proposed antenna meets industry standards there is no need to file an antenna radiation pattern.

Section 101.103(c) should specifically reject the licensing of growth channels. These channels have never been recognized by the FCC and it should not start now. Acknowledging the industry practice may encourage operators to

take a more possessive stand toward public resources. Growth channels can be acknowledged but they must be available for actual channels as required by any license. The three channels in three years will not be enforced because there is no place to enter third year capacity. If the Commission intends to monitor three year loadings, the application needs to request this information.

Section 101.103 (d)(2) relates to frequency coordination. The technical information requested should include transmit antenna gain (dB) and line losses (dB) should be specified. This section should also designate whether the unit of measurement is meters or feet.

Section 101.103 (d)(2)(x) relates to supplying future growth plans unless the request for such information is unreasonable or would impose a significant burden in compilation. Information on future growth plans should be either required or this requirement should be deleted. Allowing the industry to decide on an ad hoc basis whether a request is reasonable or whether the request imposes a significant burden will result in inconsistent compliance. If the Commission wants this information supplied it should require it without conditional language. If it does not want this information supplied the requirement should be deleted.

Finally, in Section 101.115 regarding directional antennas the Commission should include a definition of frequency congestion areas so that applicants have a clear understanding as to whether they need a category A antenna. Because of the uncertainty surrounding when an A or B antenna is

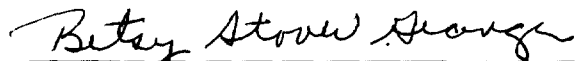
needed category B antennas are often inappropriately put in place. This leads into interference problems. A definition would alleviate this situation.

#### IV. CONCLUSION

In conclusion, we support the Commission's efforts to consolidate the rules for common carriers and private operational fixed services in new Part 101. However, as noted above, the proposed rules contain some unnecessary distinctions between private and common carrier services. The Commission's stated goal in this rulemaking is to simplify and conform the rules. This goal can better be achieved by eliminating the distinctions noted above.

Respectfully submitted,

PACIFIC BELL  
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Their Attorneys

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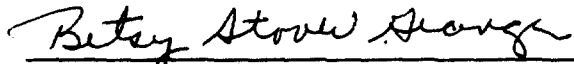
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